

Four cases of bilateral glioma of the retina cured by enucleation of the two eyes.

By E. TREACHER COLLINS.

IN the first part of volume xiii of the Royal London Ophthalmic Hospital 'Reports,' Mr. Lawford and I published a paper on "Glioma of the Retina," in which we endeavoured to fix the time which must elapse after the removal of an eye with glioma of the retina, before a patient can be definitely said to be free from fear of recurrence of the growth.

For this purpose we traced the after-history of a large number of patients who had been operated on for this disease, and searched the records of all the published cases we could find. As the result of these inquiries we found that no well authenticated case had been reported in which there had been a recurrence later than three years after the removal of an eye for glioma of the retina, and that three years may be considered as quite an outside limit.

Vetsch recorded a case in which after removal of the eye a secondary growth occurred in the parotid gland three years later, which was decided by microscopical examination to be gliomatous. His, however, appears to be an unique case, the usual interval between the operation upon the primary, and the appearance of the secondary growth is much shorter. The longest period of quiescence in the cases we traced was nine months.

I will now briefly relate the history of four cases in which both eyes were excised for glioma of the retina,

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and in which more than three years have elapsed since the excision of the second eye.

CASE 1.—Sidney R—, æt. 5 months, was admitted to the Moorfields Hospital on January 9th, 1889, under Mr. Nettleship. When the child was one month old the mother first noticed a white shining appearance in his right eye.

The day after admission his right eye was excised, and I found a typically gliomatous tumour in it, growing from the retina and occupying two thirds of the vitreous chamber. After the removal of the eye, the child, who had before been always irritable and ailing, rapidly improved in health; his mother wrote a year later, "he is now quite a different child."

All went well until December, 1891, *i. e.* three years after the growth was first noticed in his right eye. The mother then saw a shining appearance in his left eye, similar to that which she had noticed in his right. The patient was brought up to the hospital to Mr. Nettleship, who diagnosed glioma, and who excised the left eye on January 20th, 1892.

On June 14th, 1893, a year and five months after the excision of the second eye, I saw the child; he was then in good health, and there was no sign of any recurrence. I last heard from the patient's mother on July 15th, 1895, *i. e.* three and a half years after the removal of the second eye, and six and a half years after the removal of the first.

She then said: "In reply to your letter, my little boy at present is fairly well, still very cheerful and contented, but I cannot say he is a really strong child; he is much thinner, but at present complains of no pain whatever and seems very happy."

CASE 2.—A patient of Mr. Morton's, who has kindly given me permission to read you an account of her this evening. Julia T— was three months old when her parents first noticed something wrong with her right eye. She was

brought to Mr. Morton two months later (in October, 1887); he diagnosed glioma of the retina and removed the eye. His diagnosis was confirmed by pathological examination of the tumour, which was found to have the typical appearances of a glioma of the retina, and which occupied about half the vitreous chamber. Before the removal of the eye the patient had been very thin; after the operation she rapidly gained flesh. When fourteen months old her mother noticed an appearance in the left eye similar to that which had been seen in the right; the patient was at once brought to Mr. Morton, and the eye, evidently containing a gliomatous growth like its fellow, was removed.

Pathological examination of this eye showed a gliomatous growth springing from the inner surface of the retina, and, as in the other eye, occupying a considerable portion of the vitreous chamber.

Previous to the removal of the second eye the patient was again commencing to get thin, but ever since the operation has grown and thrived.

I saw the patient at intervals of about six months until April, 1893, *i. e.* four years and seven months after enucleation of the second eye; at that date she was in perfect health, and there was not the least sign of any recurrence. The family belongs to what may be termed the nomad population of London, and though I managed to trace them through numerous changes of address, since April, 1893, I have lost sight of them.

CASE 3.—Hilda L₇—, æt. 10 months, was admitted to the Moorfields Hospital under Mr. Lang on March 1st, 1891. Six weeks previous to admission the mother noticed a white appearance in the pupil of the child's left eye, and one week before admission a similar appearance in the right.

The left eye was excised the day after admission, and I found five sixths of its interior filled with a tumour growing from the outer surface of the retina, and having the characteristic microscopical appearances of glioma.

The sight of the child's right eye completely went in June, 1891. It was excised on April 4th, 1892. The retina in this eye was detached and apparently in contact with the back of the lens; on its outer surface were numerous nodules of a white flocculent growth, which was typically gliomatous. I have heard from the parents from time to time since the second operation; on one occasion the mother writes, "she is quite a jolly girl, and gets quite fat." The parents are evidently exceedingly grateful for what has been done for the child.

The patient lives at Ipswich, and I asked Dr. Sinclair of that town to see her for me, which he kindly did. He writes to me, June 25th, 1895, *i. e.* four years after removal of the second eye: "I have to-day seen Hilda L—, she is a fat, rosy-cheeked child, and is in excellent health. Now and then, at intervals, she complains of slight pain in the head in the occipital region. No other symptoms whatever."

CASE 4.—Victor A— was admitted to the Moorfields Hospital under Mr. Lang on June 4th, 1891; he was then 1 year and 4 months old. His mother gave the following history:—Nothing was noticed the matter with his eyes until he was a month old; she then observed what she described as a hole in his left eye. Previous to this there had been no discharge from it. Afterwards the eye became bloodshot and gradually shrank. When the patient was eight months old, his right eye was first noticed to be defective. She took him to a hospital and was told he had "glioma," but excision was not advised.

Upon examination a vascular yellowish mass was seen behind the lens in the right eye. The left eye was much shrunken; the cornea was small and semi-opaque. Both eyeballs were excised the day after the child's admission.

On pathological examination I found the left, the shrunken eye, to be completely filled with a grey-coloured mass, composed of the characteristic glioma cells. In the right eye the whole retina was detached and involved in a new growth

of a mottled grey and white colour on section. Microscopically it presented the same appearances as the growth in the left eye.

I have seen the patient at intervals of about six months since the operation, until September 15th, 1894, *i. e.* three years and three months after; she was then perfectly well, the sockets of the eyes were healthy, and there was not the least sign of recurrence.

Seeing, then, that in all these four cases the patient has been seen to be alive, in good health and without the least sign of recurrent growth after an interval of more than three years from the date of the removal of the second eye, *i. e.* after the longest interval at which there is any authentic record of a recurrence having occurred, I think I may justly claim that these patients are cured.

Cases such as these go to show, that when glioma occurs in the two eyes, the growth in the second one is not due to an extension of the tumour along the optic nerve and optic chiasma to the second eye, but that probably the two growths are two primary tumours of independent origin. The interval between the time at which the growths were first noticed in the two eyes was unusually long in Case 1, *viz.* three years.

It will no doubt occur to many, that granting it is possible to save life by the removal of the two eyes, would it not be better to allow the disease to run its course? Would it not be better to let the patient die of the disease than to grow up handicapped from the very outset of life by the complete loss of sight?

This is an ethical question upon which I do not intend to say much, my purpose being to show that life can be saved by the removal of the two eyes. In such cases I think we should point out to the parents of the child this fact and leave them to decide for themselves what shall be done. I may add that in the four cases I have read, the mothers of the blind children seemed exceedingly pleased and proud of them.

In conclusion, I may repeat a word of warning mentioned by Mr. Lawford and myself in the paper before referred to; which is, that only one eye should be removed at a time, and that it should be subjected to pathological examination before the enucleation of its fellow. We are cognisant of two cases in which both eyes were removed at the same sitting for supposed glioma which were afterwards found to contain no growth at all.

(October 17th, 1895.)

